# FLOOD MANAGEMENT Meeting Summary PLANNING PROGRAM Environmental Stewardship Scope **PLOOD SAFE** Definition Work Group Meeting #3

September 30, 2009, 12:30 – 5:00 pm

Location: DWR Offices – West Sacramento

3500 Industrial Blvd.

West Sacramento, California 95691

**Room 119** 

### **ENVIRONMENTAL STEWARDSHIP SCOPE DEFINITION (ESSD) WORK GROUP** ATTENDANCE:

Name	Organization	Status
Lewis Bair	Reclamation District No. 108, Sacramento River West Side Levee District, Knights Landing Ridge Drainage District	Member
Chris Bowles	CBEC, Inc.	Member
Kelly Briggs	Department of Water Resources - Flood Management	Member
John Cain	American Rivers	Member
Scott Clemons	California Riparian Habitat Joint Venture	Member
Ken Cumming	National Marine Fisheries Service	Member
Eric M. Ginney	Philip Williams & Associates	Member
Tom Griggs	River Partners	Member
John Hopkins	Institute for Ecological Health; Northern California Conservation Planning Partners	Member
Ashley Indrieri	Family Water Alliance	Member
Clarence Korhonen	City of Elk Grove	Member
Stefan Lorenzato	Yolo County Flood Control & Water Conservation District	Member
Michael Picker	Sutter Butte Flood Control Agency	Member
Pia Sevelius	Butte County Resource Conservation District	Member
Alex Stehl	California Department of Parks and Recreation	Member
Susan Tatayon	The Nature Conservancy	Member
Mark Tompkins	Trout Unlimited	Member
Julia Cox	California Department of Parks and Recreation	Alternate
Jennifer Hobbs	US Fish and Wildlife Service	Alternate
Leon Rofé	Wintu Tribe	Alternate
Nat Seavy	Point Reyes Bird Observatory	Alternate
Ken Kirby	Kirby Consulting Group	CVFMP* Executive Sponsor
Ted Frink	California Department of Water Resources	CVFPO**
Marc Hoshovsky	California Department of Water Resources	DWR Lead***

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Name	Organization	Status
Terri Gaines	California Department of Water Resources	CVFPO**
Elizabeth Hubert	California Department of Water Resources	CVFPO**
Michele Ng	California Department of Water Resources	CVFPO**
Michael Perrone	California Department of Water Resources	DES****
Matt Young	MWH	Team
Debra Bishop	EDAW/AECOM	Technical Lead
Lynn Hermansen	EDAW/AECOM	Team
Eric Poncelet	Kearns & West	Facilitator
Ben Gettleman	Kearns & West	Facilitation Support / Note Taker

<sup>\*\*</sup>Central Valley Flood Management Planning (CVFMP)

#### Absent:

Peter Buck	Sacramento Area Flood Control Agency	Member
Ellie Cohen	Point Reyes Bird Observatory	Member
Michael DeSpain	Mechoopda Indian Tribe	Member
Geoff Rabone	Merced Irrigation District	Member
Dan Ray	California Department of Parks and Recreation	Member
Monty Schmitt	Natural Resources Defense Council	Member
Tanis Toland	United States Army Corps of Engineers	Member
Chris Unkel	Ducks Unlimited	Member
Doug Weinrich	United States Fish and Wildlife Service	Member
Carl Wilcox	California Department of Fish and Game	Member
Randy Yonemura	California Indian Heritage Council	Member

### **Observer:**

	Mary Matella	UC Berkeley
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#### **WORK GROUP HOMEWORK/ACTION ITEMS**

- 1. Send additional text/comments on challenges, opportunities, principles, goals and measures of success to Ben Gettleman (bgettleman@kearnswest.com) by COB Friday, October 2, 2009.
- 2. Select work group members (see page 9 below) to review select draft meeting #4 materials by COB Wednesday, October 7, 2009.
- 3. Review ESSD Reference List and provide comments to Matt Young (matthew.c.young@us.mwhglobal.com) by COB Friday, October 9, 2009.
- 4. Review Meeting #3 Summary, and provide comments to Marc Hoshovsky (<a href="mailto:mhoshovs@water.ca.gov">mhoshovs@water.ca.gov</a>) by Friday, October 9, 2009.

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<sup>\*\*</sup>Central Valley Flood Planning Office (CVFPO)

<sup>\*\*\*</sup>California Department of Water Resources (DWR)

<sup>\*\*\*\*</sup>Department of Environmental Services

#### **ACTION ITEMS: PROGRAM TEAM**

- 1. Incorporate comments made at meeting #3 and additional suggested written edits from work group members on challenges, opportunities, principles, goals, and measures of success and create a revised draft for each deliverable. Send revised versions to work group members by COB Friday, October 9.
- 2. Facilitation team to send Meeting #3 Summary to work group members for review.

#### **MEETING OVERVIEW**

The primary purpose of Meeting #3 of the Environmental Stewardship Scope Definition (ESSD) Work Group was to continue the group's discussion of key deliverables, including "challenges", "opportunities", "principles" and "environmental stewardship goals", and to initiate the group's discussion on "measures of success."

#### **MEETING GOALS**

- 1. Review and discuss revised "challenges."
- 2. Review and discuss revised "opportunities."
- 3. Review and discuss revised "principles" for guiding the development, integration and implementation of environmental stewardship features of the CVFPP.
- Review and discuss revised "environmental stewardship goals" that should be included in the CVFPP.
- 5. Review and discuss draft "measures of success" to evaluate CVFPP's effective integration and implementation of environmental stewardship elements.
- 6. Provide instructions to guide work group feedback on environmental stewardship reference list.
- 7. Outline discussion topics for ESSD Work Group Meeting #4.

#### **SUMMARY**

## Welcome and Greetings

Meeting facilitator Eric Poncelet welcomed the meeting participants. He then reviewed the meeting agenda and meeting goals.

Mr. Poncelet referred to the PowerPoint slide of the work group timeline, reminding the group of its current place in the four-meeting process. He also referred to the PowerPoint slide of ESSD work group deliverables, which include:

- 1. Major environmental challenges
- 2. Major opportunities
- 3. List of key principles
- 4. Environmental goals
- 5. Measures of success
- 6. ESSD-specific references

#### **Revised Challenges**

Debra Bishop, EDAW/AECOMM, summarized how the challenges document evolved since meeting #2. She then invited work group members to comment on the current version.

Key work group comments on the challenges document included the following:

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- 1) #7: Revetment has an impact, but the word "eliminate" is too strong; use "limit" instead.
- 2) #1: Does this statement refer to the current flood system or the future system?
  - a) Reply from program staff: These are considered the current conditions.
  - b) Insert "existing" before "flood management system".
  - c) This reads to me that the existing system can convey design flows. I recall a USACE study claiming that it can't.
  - d) Insert the word "both" in front of "natural."
  - e) Is it accurate to say the existing system is not large enough to convey the design flows?
    - (i) Reply from program staff: This will be covered in other workgroups
- 3) #6: Habitat is often used interchangeably with vegetation; these are very different. "Riparian vegetation recruitment" would make more sense.
- 4) #8: This statement is too limited for me. Construction and maintenance can also support habitat; insert "current strategies" before "construction and ongoing maintenance." We can't manage on a single purpose basis.
  - a) I don't like the word "eliminate." We would like to eliminate some things, but this isn't the case." I would prefer "can have the outcome of reducing."
  - b) Replace "eliminates" with "conflicts with."
  - c) This is not a black and white issue. We could change the wording to "may conflict with"
  - d) Some of the current maintenance practices (i.e., removal of invasives) have a positive effect. I would say "affects" or "impacts"
  - e) Replace "eliminate" with "can reduce."
  - f) Use the word "uninformed" at the beginning of the sentence.
  - g) The elimination of species has happened; this does happen (e.g. habitat for bank swallows).
  - h) There are places where maintenance has eliminated habitat. There needs to be a notion that we can overstep and eliminate other attributes as a result.
  - i) There is an ongoing issue with USACE vegetation policy.
  - j) The problem is that the flood system currently has one goal: flood control.
  - k) Use "can negatively impact."
  - I) Are we talking about current or past practices? Past practices are permanent
- 5) #9: This is the only item that talks about water quality; this implies that if the floodplain is large enough, it will take care of water quality. I think there needs to be another item to talk about water quality.
  - a) There are other functions that the floodplain supports.
- 6) #12: Delete "resulting from California's shifting climate patterns" from the end of the sentence.
  - a) "Rapidly" is a relative term and could mean many things; this should be clarified.
- 7) #14: The system should be designed to accommodate water supply and flood protection. The system should have a dual purpose and should be balanced. This should be reframed.
- 8) #15: A number of bullets were combined under this challenge. Funding and support need to take a comprehensive approach; this is where we need to go. Funding is project based, not comprehensive.
- 9) #16: Add "water rights."
- 10) #17: Add "agricultural purposes" to bring in the working landscape context.
- 11) #17: Add "geography" to the list. "Local impacts" (economic, etc.) should also be added.
- 12) #18: Add "and agricultural purposes" at the end of the sentence.
- 13) New Challenge: Regulatory the current system requires locals to eliminate habitat to eliminate liability for future work. This is a huge disincentive. This results in habitat being removed that doesn't have to be.
  - a) Disruption of dynamic river processes: Ongoing uninformed construction and maintenance of the flood management system effects riparian and wetland habitats and can fragment remnant habitat into disconnected patches.

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- 14) New Challenge: Challenge of shared responsibility. The current system uses single purpose entities; it needs to be multi-purpose.
  - a) The challenge is developing viable partnerships given the institutional limitations.

### **Revised Opportunities**

Michael Perrone, DWR, summarized how the opportunities document evolved since meeting #2. He then invited work group members to comment on the current version.

Key work group comments on the opportunities document included the following:

- 1) General: The term "tools" is confusing to me. We should re-state these as strategies.
- General: "Setback levee" and "levee setback" are both used. We should use one and be consistent.
- 3) General: Opportunities are going to take more explanation than the challenges.
  - a) #1,2, 3, and 8 are all interconnected and very similar, but they don't adequately explain what the opportunity is. This is going to require more information and clarification.
  - b) Reply from program staff: We will get to management actions later.
- 4) #1: "Well-timed flood management" doesn't capture that there is an opportunity to accommodate water supply, flood protection and ecosystem support. We should have a multi-benefit concept.
  - a) This should also include re-operating reservoirs to restore a more natural hydrological regime (moderate inundations, not floods).
  - b) Improve forecasting to optimize management for water supply and flood control. A lot of reservoirs are operated so that the rivers downstream never go over bank. It would be nice to reinitiate moderate inundation regimes.
  - c) Overbanking is a dangerous strategy.
- 5) #2: Add that if we have increased floodplain downstream capacity, that creates an opportunity for reservoir reoperation.
- 6) #5 & #6: Should we defer these to the O & M group?
  - a) Having overlap with the O&M group is a good thing.
- 7) #6: What was the intent with this opportunity?
  - a) DWR maintenance has been ineffectual because there was no plan. There need to be site specific plans as well as system wide plans.
  - b) Add to that sentence "habitat" or "environmental concerns."
  - c) Need to communicate that it is complementary to a system-wide plan.
- 8) #16: This is not clear.
  - a) It is intended to look at opportunities to leverage multiple funding sources (i.e., when a road is being repaired, a levee is as well). It is intended to get at operations efficiency.
  - b) Remove the word "mandates" and add "and maintenance" to the end.
- 9) #18: Add local maintaining agencies.
  - a) They need funding along with management responsibility.
- 10) Insert new opportunity: The opportunity to define what the environmental community means when they use certain terms. There is an opportunity to quell fears by better defining "floodplain capacity" and "overbank," for example.
- 11) Insert new opportunity: We have the opportunity to define the key attributes that we want, the floodplain amount of riparian habitat we want, and what places are appropriate on the floodplain for development. The plan could identify a series of these attributes and define them.
  - a) Reply from program staff: I see this as an outcome of the plan, not an input.

### **Environmental Stewardship Goals**

Lynn Hermansen, EDAW/AECOM, summarized how the environmental stewardship goals document evolved since meeting #2. She then invited work group members to comment on the current version.

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Key work group comments on the environmental stewardship document included the following:

- 1) General: We should not ignore that we have an existing footprint that doesn't encourage habitat. Maximizing the opportunity for habitat within the existing system should be added.
- 2) General: A good understanding of the physical and ecological system we have in front of us is a good starting point for a basis of the planning effort.
  - a) This sounds like a principle.
  - b) Reply from program staff: We are trying to incorporate the notion of sustainability into the plan. This is in the existing goals.
- 3) There are five overall goals for the plan that have been drafted. We are incorporating the workgroup input into these goals. When the goals go out next week for the larger plan, these will be sent to everyone.
- 4) O1 & O2 are related. They could possibly be combined together.
- 5) E1: Ecosystem goods and services benefit both people and habitat. This may not be recognized up front, so this should be clarified.
- 6) F2: Replace "alleviate" with "share." The costs won't go down.
- 7) If you take the merged goal O1 and O2, do you not achieve E1?
  - a) E1 is more specific. It could be provided at varying levels. I support having some specificity.
  - b) E1 could be an objective under O1/O2. If we don't boil it down, project staff will do it for us.
- 8) F2 is a strategy. F1 can address both financial goals.
- 9) F1: Add "develop mechanisms within commerce and governments to support floodplain management in perpetuity."
  - a) Remove the example.
- 10) F1 and F2 and strategies, these are not goals for the plan. This is a way of accomplishing something, not what you want to focus the plan on.
  - a) It will show up as a principle or a mandate. It is not likely to show up as a goal itself.
- 11) F1 and F2: Add "efficiency" and "accountability."
- 12) OM 2: Regulatory sounds like you want to reduce future development. We want to be getting away from project-by-project development and towards programmatic development.
  - a) Revise to say "reduce regulatory burdens related to future development."

## Principles for Guiding the Development, Integration and Implementation of Environmental Stewardship Features of the CVFPP

Marc Hoshovsky, DWR Lead, summarized how the principles document evolved since meeting #2. He reminded the group that this document refers to principles for the integration of environmental stewardship into the CVFPP. He then invited work group members to comment on the current version.

Key work group comments on the principles document included the following:

- 1) General: There are a number of words to add to the glossary.
  - a) "Wildlife friendly agriculture" needs to be defined.
  - b) There is a definition in the Department of Fish and Game wildlife program.
- 2) General: Use a desirable adjective for flood management (i.e. effective) and be consistent.
- 3) General: I think this would make more sense if we insert the word "should" before each principle.
  - a) I don't agree; a principle is a premise, not a command.
- 4) #1: I don't know what ecosystem integrity means. This should be clarified.
- 5) #1: Suggested revised text: "A sustainable flood management system improves and enhances long-term ecosystem sustainability for ecosystems..."
  - a) Insert "robust" before flood management system.
- 6) #2: While we are dealing with multiple ecological levels, we need to be sensitive to local situations. We don't want the misapplication of broad needs; there needs to be a balance of the broad view with sensitivity to local attributes.

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- 7) #2c: Change to the "conservation of." Many species populations are not stable; a lot of them fluctuate.
- 8) #2: I need clarity on "multiple ecological levels." Are a,b and c levels?
  - a) Yes, the three below are the levels processes, habitats, and species.
  - b) Replace "levels" with "kinds."
- 9) #3: Economy of scale increases efficiency ecologically and economically. This should be incorporated.
- 10) #5: What kind of cost benefit analysis are we talking about? Is it numerical? It is not clear how this will be done.
  - a) It recognizes that there are a variety of cost-benefits to be accounted for.
  - b) This isn't supposed to be how we get there. This is intended to communicate that there is more to consider in a cost benefit analysis than the traditional engineering approach. It brings in additional values that we haven't historically acknowledged.
  - c) We need to capture the recreation and local economy that will be affected. We could consider fees that are required when visiting a reservoir, for example. We need to look outside of the conveyance system.
  - d) Add "including, but not limited to benefits from ecosystem services."
- 11) #8 or #11: The concept of being multi-objective could be incorporated to one or both of these principles.
- 12) #9: The continuing improvement of scientific methods is extremely important. Often what we think we know turns out to be wrong.
- 13) #9: Adaptive management needs to be included in this principle. You could combine #9 and #10 and strengthen it.
- 14) New Principle: The social side of the triple bottom line isn't clarified. This needs its own principle.
- 15) New Principle: Adopt a collaborative corridor approach that encourages multiple level projects. This was included in a previous version of the goals (Goal P5); this should be included in the principles.
  - a) Goal P5: Adopt a collaborative, corridor-based, transparent approach to the flood management planning process that includes local, state and federal government agencies, non-profit organizations, and local landowners and that encourages multiobjective projects.
- 16) The 2002/4 Floodplain Management Task Force developed the concept of multi-objective, multi-benefit projects that benefit agriculture, ecosystem, etc.
- 17) New Principles
  - a) The plan should be guided by a long-term vision.
  - b) Add something about multiple objective planning.
    - i) This is part of the overarching Floodsafe Plan.

#### **Measures of Success**

Debra Bishop, EDAW/AECOMM, introduced the measures of success document and its intended purpose.

Ken Kirby, CVFMP Executive Sponsor, explained that the planning process needs something tangible and measurable to evaluate how environmental stewardship is incorporated into plan. He added that it should be a tangible and measureable checklist.

Key work group comments on the challenges document included the following:

#### General Comments:

- 1) Highlight the final sentence in the introduction paragraph, this is important.
- 2) This is not worded quantitatively; we need to develop something more tangible.
  - a) In the next step in the planning process, that group will come up with specific numbers.

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- 3) If we use a "yes/no" measure, we could end up with a range from the really robust to barely at
- 4) Instead of "measures", we could use "indicators" of success instead.
  - a) I support indicators rather than measure of success. One major indicator is that it is important to have the land managers meeting with the environmental folks. Another major indicator is making sure the two groups understand each other.
- 5) This document could have two different categories: measures along the way, and measures in the final plan to see if we've been successful.
- 6) Measures of success of the plan depend in large part on how specific the plan will be.
  - a) Is it on the ground where changes will be?
  - b) Will it be just a general guidance document?
  - c) There are going to be dozens or hundreds of individual actions on the ground, but we need to know whether we are going to build in the existing footprint, expand reservoirs, or expand our floodways.
  - d) We could set up three or four different scenarios to measure.
  - e) The plan should be based on some quantitative methods and models.
    - i) This gets to the output, not how the planning effort will be completed.
    - ii) The question of whether we should put a bypass here or not will have to come later. Our ability to link ecosystem health and hydrological models is not very successful. Ecosystem modeling isn't matured yet, and it won't likely advance in the next few years.
    - iii) The Delta risk strategy was close to developing a model to evaluate success of ecosystem integration before it ran out of money.
- 7) We shouldn't give up on modeling. Without modeling, we are not evaluating environmental stewardship on the same level as other elements.
- 8) Using the word "providing" would make these more like workable action items.
- 9) We can't use multiple answers; it needs to be yes/no or true/false. Once we determine how we will measure it, we need a rubric as to how we will measure it. There are several levels to the approach, but at this point it's going to be subjective.
- 10) Are we talking about metrics?
  - a) I am hearing objectives (i.e., do we have actionable objectives). Tell us how we can incorporate environmental stewardship in a satisfactory manner while we are developing the plan.

#### Specific Comments:

- 1) #'s 1, 2 and 3 can be combined.
- 2) #8: This incorporates too many elements. Maybe it needs to be parsed out further.
- 3) #9 of the principles can be a guiding principle. One measure of success could be to take it to an independent review for the science.
- 4) #12 is similar to #8. It is difficult to check this off with all of the elements incorporated. These need to be broken out into separate categories.
  - a) You could also replace "provide" with "recognize the opportunities to."
- 5) #16: Insert "contains guidelines" before "leverage" (change to "for leveraging").
- 6) #14 and #15 can be combined.
- 7) #17 and #18 can be combined.
- 8) #14 and #15: Having the interdisciplinary interests represented in the work groups is the most important aspect of insuring that we've achieved these measures.

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### **Deliverable Topic Groups**

Eric Poncelet invited work group members to join program staff review teams in developing revised drafts of the five deliverables (challenges, opportunities, principles, goals, measures of success). The following work group members volunteered to participate:

- Challenges Alexandra Stehl
- Opportunities Alexandra Stehl
- Principles Mark Tompkins, Susan Tatayon
- Goals John Cain
- Measures of Success Alexandra Stehl, Susan Tatayon, John Cain, Mark Tompkins

### **Final Comments and Questions**

Ken Kirby provided the work group with an update of where they were in the CVFPP development process. He thanked the work group members for their participation in the group.

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